

West Nile Season Arriving Soon

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Indiana will shortly be entering its fourth summer season with West Nile virus as a health threat. Over 300 human cases have occurred in the past three years that human cases have been reported in Indiana. The case investigations have given us a picture of West Nile's impact that is similar to that seen across the county. Every age group can be affected, but those in older age groups (above 50 years of age) tend to have higher rates of clinical illness and tend to suffer more severe disease. It is important to all of our citizens understand that West Nile can be a significant health risk, but is one that can be prevented. In the past we have stressed efforts at mosquito breeding site reduction and use of personal protective measures as prevention steps.

During the spring of 2004, questions about West Nile virus and its prevention were included in the Behavioral Risk Factor Surveillance System (BRFSS) questionnaire to measure the effectiveness of the West Nile virus prevention message. While the sample size was small, the results are interesting in that the West Nile virus message appears to have been received, but improvements in some areas are required. The table below provides some highlights to the results of the survey.

1. During summer evenings, how often to you spend at least 30 minutes outside doing things like sitting, working in your yard, or taking a walk?
 - Most evenings – 61%
 - At least once a week – 29.8%
 - Less than once a week – 5.9%
2. Last summer, did you take any of the following measures to protect yourself from mosquito bites?
 - a. Avoid outdoor areas where you knew there were mosquitoes- Yes - 52.9%
 - b. Did you use insect repellent on your skin or clothing – Yes - 69.6%
3. How often did you use repellent? Always - 26.7%, Sometimes - 63.7%
4. Last summer, did you take any of the following measures to protect yourself from mosquito bites?
 - a. Did you make sure there were no holes in your screens? Yes - 75.4%
 - b. Did you remove standing water from around your house? Yes - 65.3%
 - c. Did you check and clean your gutters? Yes - 66.3%
5. Has anyone in Indiana ever been seriously ill or died from West Nile virus? Yes -48.6%
6. Has West Nile virus been detected in your community in birds, mosquitoes, or people? Yes – 34.5%

It appears that more than 50% aren't aware that West Nile virus has been found in every county in the state or that over 300 individuals have been ill with a West Nile infection. Since most Indiana citizens spent some time out-of-doors during prime mosquito biting times, it is encouraging to see that almost 70% of those surveyed are using insect repellents, but disappointing that just over one-quarter always use repellents. The use of repellents to prevent mosquito bites is effective not only to prevent West Nile virus infections, but also prevents infections with Indiana's other mosquito carried viruses (St. Louis Encephalitis, LaCrosse Encephalitis, and Eastern Equine Encephalitis) and Indiana's tick-borne diseases (Rocky Mountain Spotted Fever, Lyme Disease, and Ehrlichiosis).

During the upcoming West Nile virus transmission season, we should continue to stress the risk of disease transmission using the bird and mosquito surveillance data. It has been suggested that effective media messages should be delivered in twenty-seven words, given in nine seconds, repeated three times. One statement that meets those qualifications is: *We can prevent the transmission of West Nile virus by: removing mosquito breeding sites from around our homes; and using personal protective methods to prevent mosquito bites.*